



The A-dec 551 assistant's instrumentation is equipped with either a short or long assistant's arm for easy positioning of instrumentation. Both arms are equipped with a touchpad and a holder assembly with independent positioning features. The solids collector is also a part of the assistant's instrumentation, located at the base of the arm.

This section provides information related to servicing, maintenance, and adjustments. Detail on how to service the assistant's instrumentation and troubleshoot specific problems is presented. For information on service parts, see the *Genuine A-dec Service Parts Catalog* or contact A-dec customer service.

Tip-Up Feature

A pivot joint, located close to the support link, allows the entire arm to tip-up, when it contacts an object.

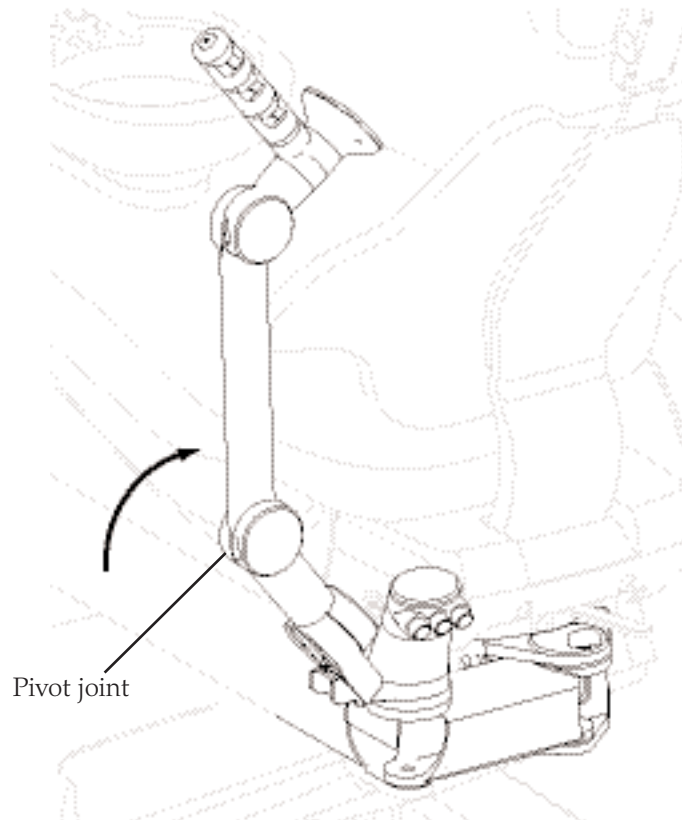


Figure 67. Assistant's arm demonstrating the tip-up feature.

How to Identify A-dec 551 Assistant's Instrumentation Components

Item #	Part Number	Description
1	77.0315.00	Long arm with single 3 position standard holder
—	77.0316.00	Long arm with single 4 position standard holder
—	77.0317.00	Long arm with dual 2 position standard holder
—	77.0322.00	Short arm with single 3 position standard holder
—	77.0323.00	Short arm with single 4 position standard holder
—	77.0324.00	Short arm with dual 2 position standard holder
2	77.0121.00	Vacuum pipe
3	035.053.01	O-ring, red, pkg 10
4	002.094.02	Buttonhead socket screw 10-32 x 1/4
5	77.0341.00	Vacuum connector kit

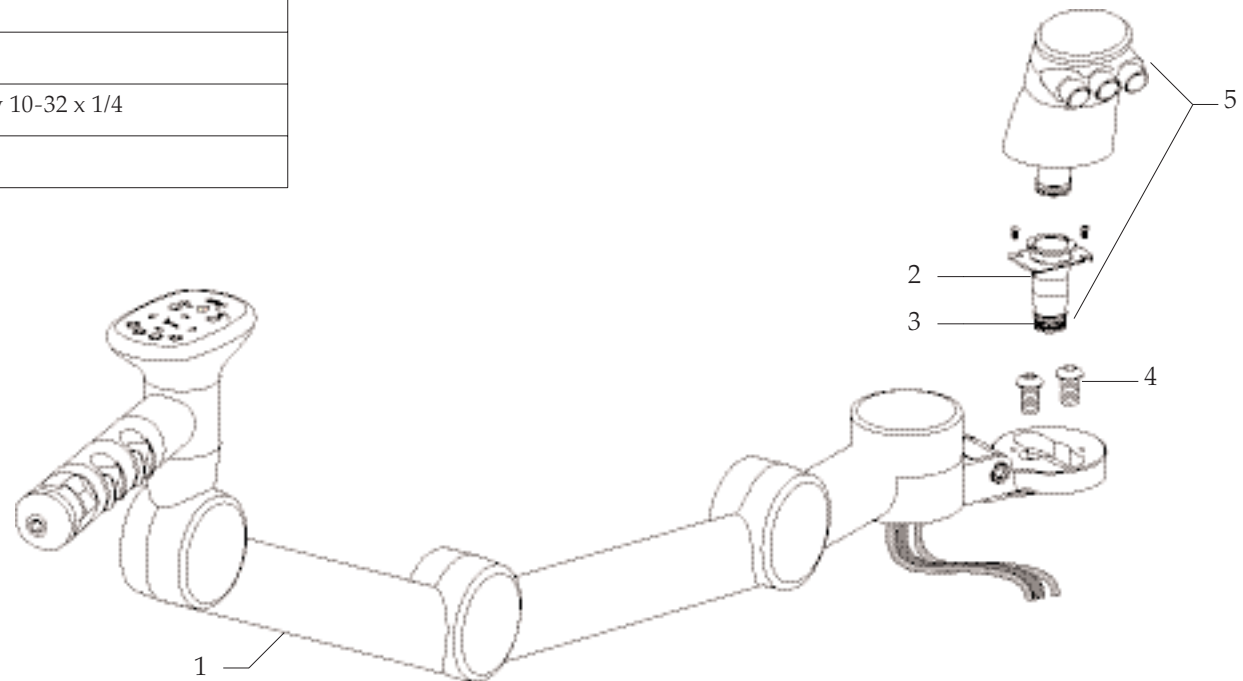


Figure 68. Assistant's long arm assembly with a single 3 position holder assembly.

How to Identify Assistant's Holder

There are two types of assistant's holders, standard and electric.

Standard Holder

The touchpad does not need to be removed when disassembling the standard holder.

Item #	Part Number	Description
1	99.0649.00	Turret
2	99.0661.00	Turret insert
3	99.0660.00	Axle
4	99.0653.01	Holder, SE, syringe kit
—	99.0650.01	HVE standard kit
5	99.0648.00	End cap assembly

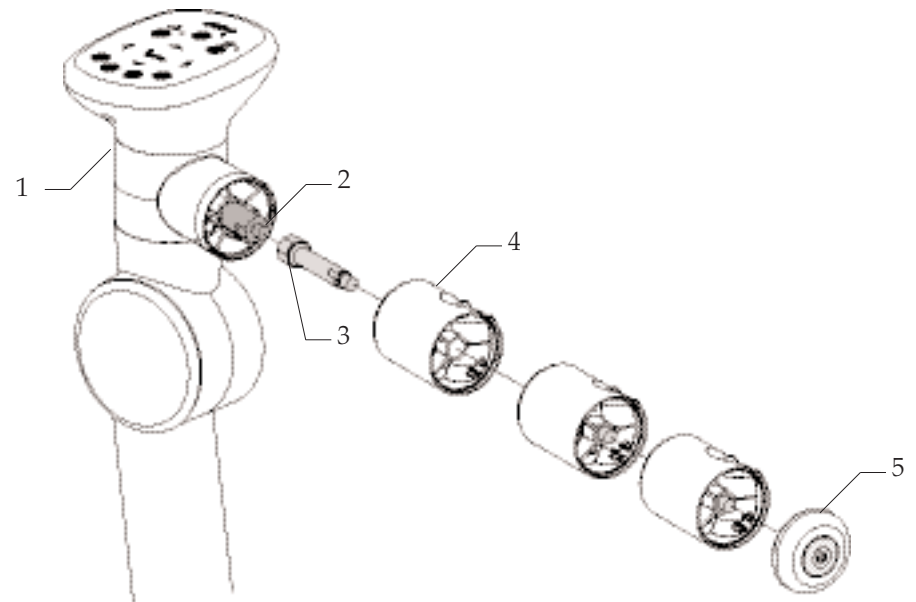
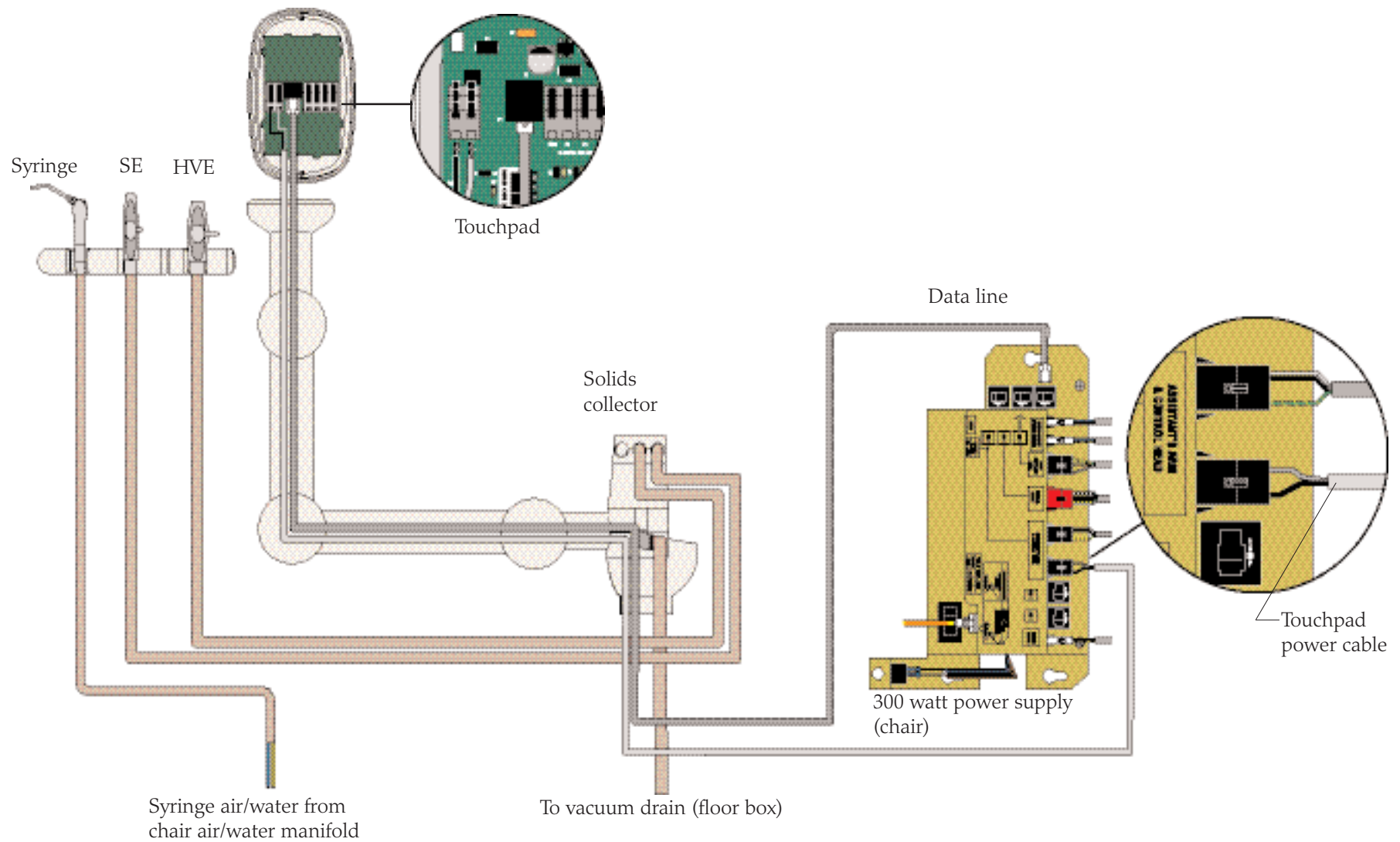


Figure 69. Identifying assistant's holder components.

Assistant's Standard Holder Flow Diagram

This flow diagram describes the plumbing and electrical connections of the assistant's standard holder assembly and solids collector.



Assistant's Electric Holder

The electric holders provide vacuum On/Off switching for users whose vacuum system requires this functionality. The vacuum pump will activate automatically, when the HVE or SE is lifted from the holder. The vacuum will be turned off, when placed back into the holder.

Power OFF the unit before disassembling the electric holder assembly. The touchpad needs to be removed when disassembling the electric holders. Unscrew the end cap assembly to disassemble the individual holder positions.

Item #	Part Number	Description
1	99.0649.00	Turret
2	99.0699.00	Inner hub
3	99.0661.00	Turret insert
4	99.0673.01	Holder, SE electric holder kit
—	99.0674.01	Holder, HVE electric holder kit
5	99.648.00*	End cap assembly
6	99.0698.00	Bearing
7	77.0385.00	Stop
8	99.0687.00	Spacer
9	77.0125.01*	Head mount
10	77.0021.00	Knuckle cover
11	99.0660.00	Axle

* Item not for sale.

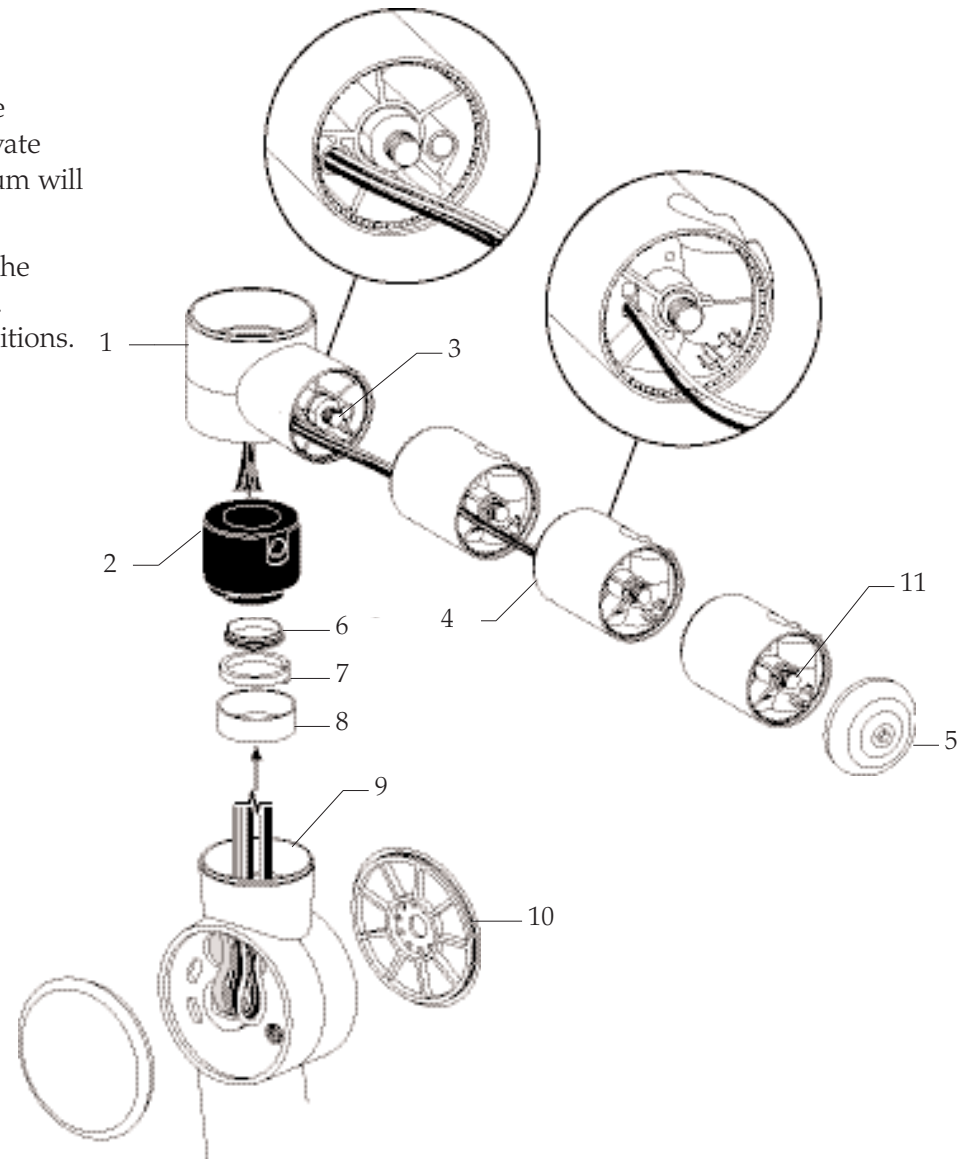
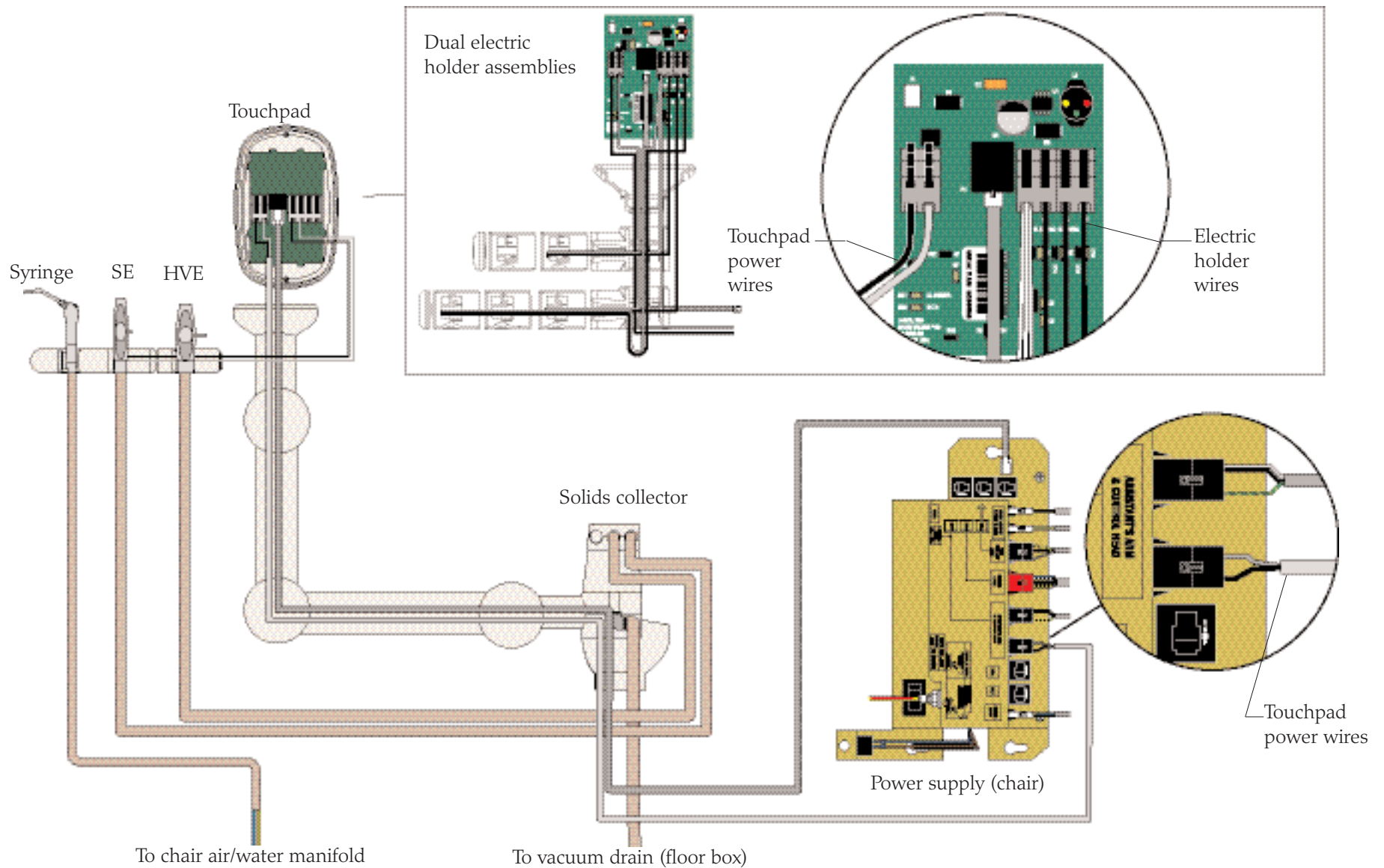


Figure 70. Identifying the electric assistant's holder components.

Assistant's Electric Holder Flow Diagram

This flow diagram describes the plumbing and electrical connections of the assistant's electric holder assembly and solids collector.



Assistant's Touchpad

The assistant's instrumentation uses a standard touchpad that serves as a single touch surface for controlling the chair, dental light, and cuspidor or A-dec relay module (s). The touchpad can rotate 340° for access and visibility.

Item #	Part Number	Description
1	90.1078.00	Standard touchpad with circuit board
2	77.0335.00	Touchpad base
3	025.002.01	Cable tie, pkg 10
4	041.663.00	Cable bushing
5	77.0123.00	Bolt
6	99.0651.00	Spline
7	004.238.00	Washer, Nylatron
8	003.078.00	Socket head screw, 4-40 x 1/4
9	004.237.00	Washer, wave
10	004.060.00*	Washer

* Item not for sale.

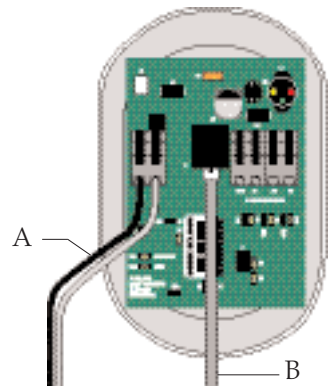


Figure 71. Assistant's touchpad with standard holder connections. (A) 24 VAC; (B) data line

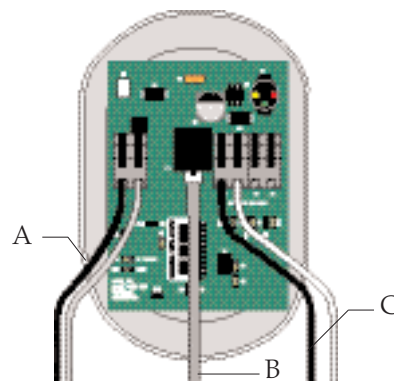


Figure 72. Assistant's touchpad with electric holder connections. (A) 24 VAC; (B) data line; (C) electric holder

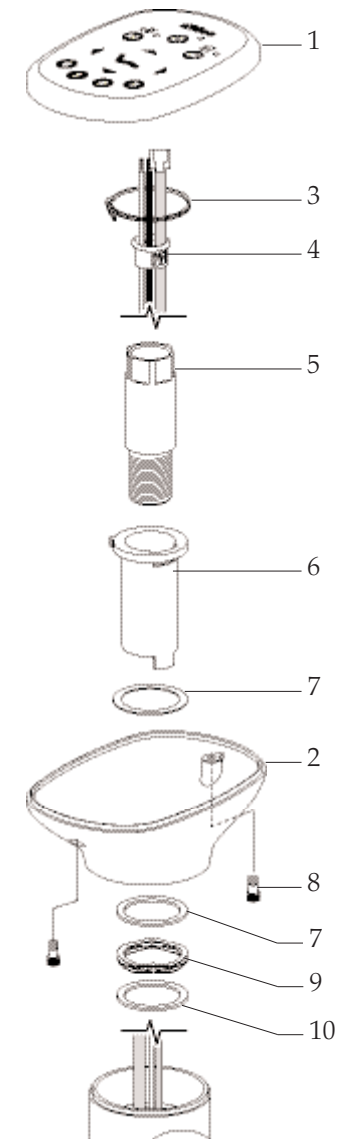


Figure 73. Identifying the assistant's touchpad components.

Solids Collector

The solids collector screen prevents solids from entering the central vacuum system when the High Volume Evacuator (HVE) or Saliva Ejector (SE) are used. A regularly maintained solids collector is necessary for optimal performance of the vacuum system. If the vacuum system performance is less than optimal, verify that the screen has been replaced.

CAUTION: Use appropriate gloves when handling contaminated parts.

Solids Collector Removal

- Lift off the screen, and cap, then twist off the triple vacuum connector.
- Turn the vacuum tower base to face the back of the chair and lift up.

Item #	Part Number	Description
1	77.0254.00	Vacuum tower cap
2	030.035.02	O-ring, pkg 10
3	11.1284.01	Screen, pkg 10
4	77.0347.00	Connector, triple vacuum
5	77.0362.00	Vacuum tower base with funnel
6	035.053.01	O-ring, red, pkg 10
7	11.1280.00	Cap

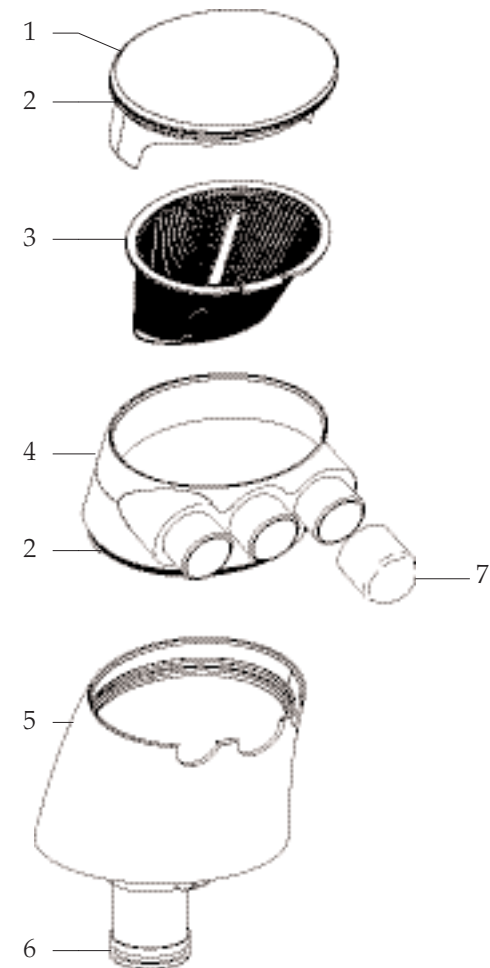


Figure 74. Identifying the solids collector components.

**Autoclavable HVE Assembly without Tip
(P/N 11.1286.00)**

Item #	Part Number	Description
1	11.1071.00	Body
2	11.1074.00	Rotor assembly with O-rings
3	11.0998.01	Screen, pkg 5
4	034.014.01	O-ring
5	11.1292.00	Standard HVE tubing assembly
	11.1294.00	11 mm HVE tubing assembly (adapts 15 mm HVE to standard 11 mm HVE)
6	034.018.00	O-ring
7	034.013.01	O-ring

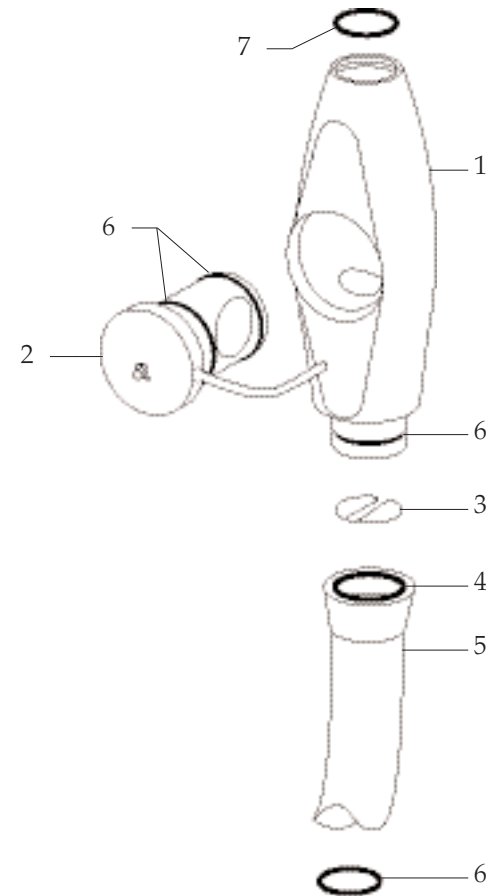


Figure 75. Identifying the QD HVE components.

**Autoclavable HVE with Large Bore 15 mm
(P/N 12.1125.00)**

Item #	Part Number	Description
1	12.1114.00	Body
2	12.1116.00	Rotor assembly with O-rings
3	034.018.02	O-ring, pkg 10
4	12.1109.00	Screen
5	11.1293.00	Tailpiece assembly
6	034.019.01	O-rings, pkg 10

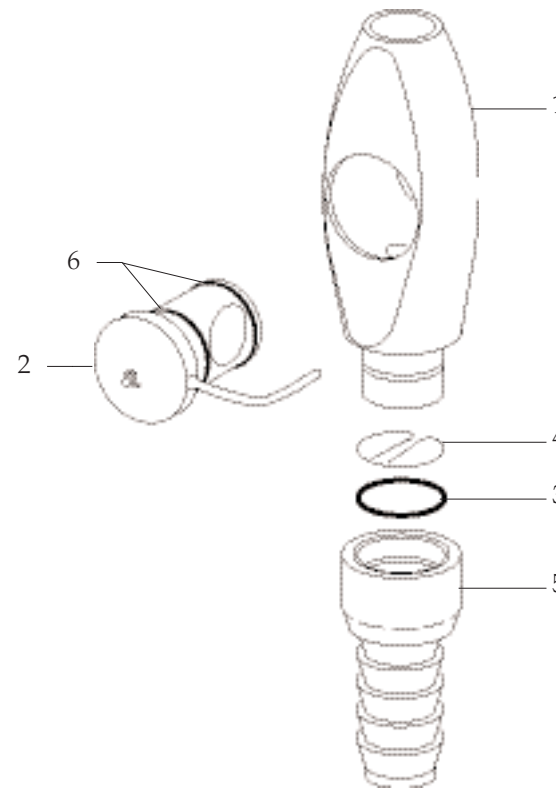


Figure 76. Identifying the large bore, 15 mm HVE components.

**Autoclavable Saliva Ejector
(P/N 12.1100.00)**

Item #	Part Number	Description
1	034.107.01	O-ring, pkg 10
2	034.012.01	O-ring, pkg 10
3	12.1089.00	Body
4	12.1093.00	Rotor assembly, with O-rings
5	12.1088.00	Tailpiece

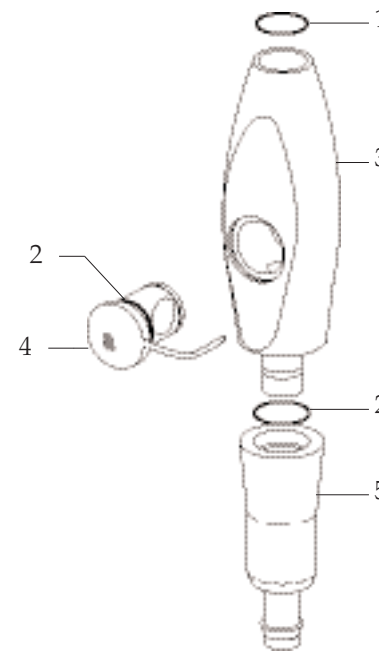


Figure 77. Identifying the autoclavable saliva ejector components.

Autoclavable Syringe (P/N 23.1011.00)

Item #	Part Number	Description
1	23.1112.00	Syringe tip retainer, non-locking
2	013.064.01	Spring, pkg 10
3	23.1232.00*	Valve assembly with O-rings, autoclavable
4	23.1193.01	Screw, pkg 5
—	23.1150.00	Autoclavable syringe assembly and 7 ft tubing
6	030.002.02	O-ring, pkg 10
7	23.1015.00	Handle
8	024.155.02	Syringe tubing assembly, straight, 7 ft
9	035.048.01	O-ring, pkg 10
10	034.003.01	O-ring, pkg 10
—	23.1090.00	Syringe tip retaining nut

* Item not for sale.

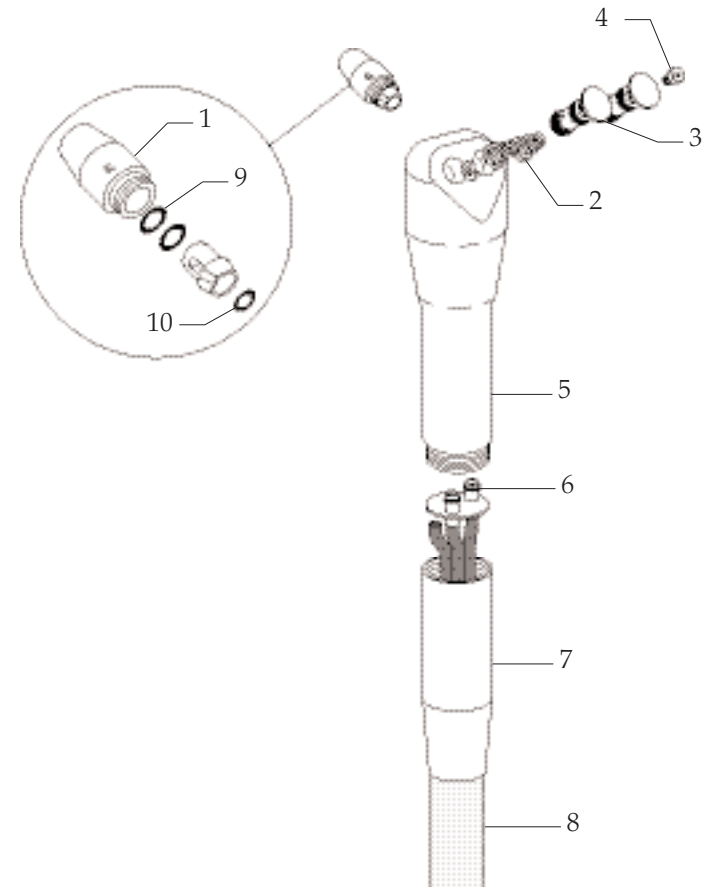


Figure 78. Identifying the autoclavable syringe components.

How to Adjust Assistant's Instrumentation

Left or Right Conversion

The assistant's instrumentation can be easily positioned to the opposite side of the chair.

To reposition the assistant's instrumentation:

1. Loosen the support link locking knob located under the swivel brake handle.
2. Unsnap the support link cover, and reposition the arm to the opposite side. If the support side system includes a support center, tip up the assistant's arm so the support center can swing past it when repositioning the assistant's arm.
3. Reattach the support link cover, and tighten the support link locking knob.

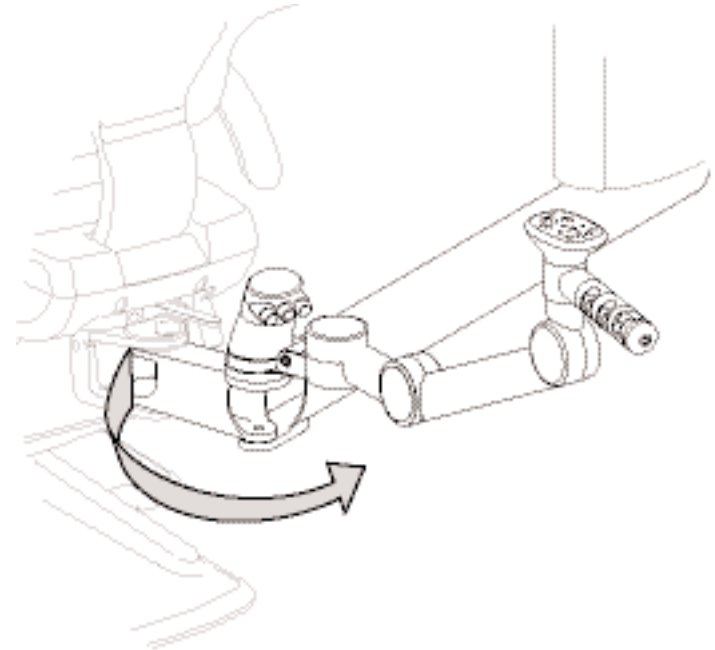


Figure 79. Reposition the assistant's arm.